

## CLAIMS

1. An in-line screw type injection molding machine, comprising:

screw rotation stop detection means for bringing a screw into a freely rotatable state from commencement of injection and detecting, after the injection, that the rotation of said screw has stopped; and

screw position detection means for detecting a position of the screw when said screw rotation stop detection means detects a stop of rotation.

2. The injection molding machine according to claim 1, further comprising screw position correction means for correcting, on the basis of a screw position detected by said screw position detection means, the screw position that has been set in order to control an injection process.

3. The injection molding machine according to claim 1 or 2, further comprising setting means of arbitrarily setting timing whereat said screw is brought into a freely rotatable state.

4. The injection molding machine according to claim 1 or 2, further comprising means for limiting, to one direction, a direction of rotation of a screw that is brought into a freely rotatable state.

5. The injection molding machine according to claim 1 or 2, further comprising means for setting, to an arbitrary value, torque of rotation of a screw when it has been brought into the freely rotatable state.

6. An in-line screw type injection molding machine, comprising:

means for bringing a screw into a freely rotatable state from commencement of injection; and

means for fixing rotation of the screw again after said screw has been brought into a freely rotatable state.

7. The injection molding machine according to claim 6, further comprising means for arbitrarily setting timing whereat the screw is brought into the freely rotatable state and timing whereat the rotation of the screw is fixed again.

8. The injection molding machine according to claim 6 or 7, further comprising means for limiting, to one direction, a direction of rotation of a screw which is brought into a freely rotatable state.

9. The injection molding machine according to claim 6 or 7, further comprising means for setting, to an arbitrary value, torque of rotation of the screw when it has been brought into the freely rotatable state.